ABSTRACT

An interference canceller capable of reducing interference between users by generating appropriate replicas. This canceller carries out a hard decision on a signal after FEC decoding and carries out error detection on the resulting signal, and, when an error is detected, generates a replica with a smaller weighting factor assigned to an erroneous signal or generates a replica using a provisionally detected value prior to FEC decoding (hard decision value or soft decision value). Or when the error detection result in the previous stage is OK, the canceller generates a replica using the hard decision value in the previous stage.